

CLAIMS

What is claimed is:

1. An automatic library for cartridges of a data storage tape, comprising:
 - at least one drive for cartridges, said cartridges having the form of flat right parallelipiped, each said drive having a cartridge pocket adapted to receive a cartridge; and
 - a magazine, said magazine comprising one or more receivers for said cartridges, each of said receivers being adapted to revolve on a closed path of revolution about said at least one drive,
 - wherein said cartridge pocket of a drive and the receivers of the magazine are disposed such that the magazine is positionable with one of said receivers being aligned with the cartridge pocket of a drive along an insertion axis for transfer of a cartridge,
 - wherein said at least one drive has a plurality of side walls enclosing said drive within said path of revolution, said at least one drive further having a diagonal dimension, and
 - wherein the path of revolution of the magazine is noncircular such that a diameter of the path of revolution in a direction perpendicular to the side walls of said at least one drive is less than a diameter of the path of revolution in the direction of the diagonal dimension of said at least one drive.
2. The library as claimed in claim 1, wherein the path of revolution of the magazine comprises straight path sections along at least one of said side walls.
3. The library as claimed in claim 2, wherein the path of revolution of the magazine has the form of a rectangle with rounded-off corners.

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4. The library as claimed in claim 1, wherein the cartridges are disposed in the receivers of the magazine and in the cartridge pocket of the drive lying with their flat side in the plane of the path of revolution.
 5. The library as claimed in claim 1, wherein the cartridges are disposed in the receivers of the magazine and in the cartridge pocket of the at least one drive standing on end with respect to the plane of the path of revolution of the magazine.
 6. The library as claimed in claim 5, wherein at least two drives are provided with vertical cartridge pockets disposed parallel one next to the other.
 7. The library as claimed in claim 5, wherein the magazine comprises revolving carriers which contain the cartridges, at least two cartridges are disposed on each carrier and the carriers are positionable offset parallel to the front side comprising the cartridge pocket of the at least one drive, such that each of the cartridges disposed on the carrier is positionable in front of the cartridge pocket of each drive.
 8. An automatic library for cartridges of a data storage tape, comprising:
 - at least one drive for cartridges having a cartridge pocket adapted to receive a cartridge; and
 - a magazine including one or more receivers for holding said cartridges, each of said receivers being adapted to revolve on a closed path of revolution about said at least one drive,
 - wherein each of said receivers is capable of being aligned with the cartridge pocket of each of said at least one drive along an insertion axis for transfer of a cartridge between said receiver and said cartridge pocket, and
 - wherein the path of revolution of the magazine is noncircular.

9. The library claimed in claim 8, wherein said receivers are adapted to hold said cartridges in an upright position and said cartridge pockets are adapted to receive said cartridges in said upright position.
10. The library claimed in claim 9, wherein each of said receivers is adapted to hold a plurality of cartridges.
11. The library claimed in claim 8, wherein said receivers are adapted to hold said cartridges in a flat position and said cartridge pockets are adapted to receive said cartridges in said flat position.
12. A method of accessing cartridges in an automatic library, comprising:
providing at least one drive for cartridges, said cartridges having the form of a flat right parallelepiped having a flat side, each said drive having a cartridge pocket adapted to receive a cartridge;
driving one or more receivers for said cartridges on a closed path of revolution about the drive, said path of revolution being noncircular;
aligning one of said receivers with said cartridge pocket of one of said at least one drive along an insertion axis for transfer of a cartridge, and
transferring a cartridge between said one of said receivers and said cartridge pocket.